



Review Article

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A REVIEW ON ANIDRA: AN ANALYSIS THROUGH AYURVEDA APPROACH

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ABSTRACT

Anidra-a sleep disorder is major healthcare concern in many developed countries. Hurry- worry- Curry pattern of lifestyle has contributed much to the problem of Anidra (Insomnia). The disease is well addressed in Ayurvedic literatures. Cause of Nidra, types of Nidra, rules of Nidra, relationship of Nidra with Sharir (body) and Manasika (mental) doshas, treatment of Anidra and Atinidra are narrated in ancient Ayurveda text. Modern medical services still do not have a specific solution to this problem. Sleeping pills are developing the dependency and potential side effects like, dizziness, drowsiness, loss of appetite, constipation etc. Sedative hypnotic drugs are normally used for the treatment of Insomnia which shows dose dependent depression of the central nervous system. There is a need to explore the treatment modalities advised in Ayurveda like Nidan Parivarjana, Aahar, Vihar and Chikitsa (Shaman and Shodhan). The present review article comprises of the importance of Nidra, Causes of Anidra, Management of Anidra through Ayurveda and Nutraceutical perspective.

Keywords: Sleep, Anidra, Insomnia, Ayurveda, Nutraceutical, Sarpagandha, Ashwagandha, Melatonin, L-Tryptophan.

INTRODUCTION

Ayurveda has indicated three important facts to keep a person healthy as Aahar (diet), Nidra (Sleep) and Bramhacharya (Celibacy) i.e., three basic physiological requirements for sustenance of life. This is termed as trayoupstambha (three sub pillar), which are identical to the three Vata Pitta Kapha doshas.¹ Among them Nidra is a crucial phenomenon for the maintenance and repairing of both body and mind for the living beings.²

According to Acharya Charak, happiness and misery, appropriate and inappropriate development, strength and weakness, potency and impotency, intellect and non-intellect, life and death of an individual depend on appropriate and inappropriate sleep. Proper sleep plays a vital role in maintaining good health proficiency and state of emotional well-being. Improper sleep may cause severe fatigue, anxiety, depression and lack of concentration. It is a common sleep-related disorder which is 1.5 times more common in persons aged more than 65 years. Anidra is influenced by several lifestyle factors such as excessive caffeine intake, drug and alcohol misuse, smoking, overworking, over-exercising and irregular sleep patterns. Hence, Anidra comes under the category of lifestyle and geriatric disorder.¹

The natural phenomenon of giving sufficient rest to the body (sharir) and mind (mann) is sleep and Anidra (insomnia) is a state in which the patient is unable to sleep properly which adversely affects his daily activities. For the complete well-being of an individual, equilibrium between all the doshas, sapta dhatu are as important as trayoupstambha. Ayurveda has elaborated clearly about its effect and significance.³ The main aim of this article is to explore the importance of Nidra, to study the cause of Anidra (Insomnia), and to study the various Ayurvedic and Nutraceutical approaches for the management of Anidra (Insomnia). Different Ayurveda texts, journals, research papers, articles, FSSAI guidelines and API are referred to study the concept of Ayurvedic

and Nutraceutical approach to Anidra (Insomnia) and its usefulness.

Prevalence

- According to WHO health survey, about 35% of people in India have mild to extreme difficulty related with sleeping.
- According to an Institute of Medicine Survey, about 50-70 million Americans suffer from a chronic disorder sleep.
- More than one half of the adults in the United States undergo at least intermittent sleep disturbance.⁴

Disease Review

Nirukti

Etymology of Nidra: The derivation of the word 'Nidra' is as follows:

The term 'Nidra' is derived from the root "d/a" with prefix 'ina' which means undesired to lead, it is a state which is hated, therefore, it is termed as 'Nidra'.⁵

Synonyms of Nidra: The Meanings and Synonyms of Nidra:

In Amarkosha, four synonyms have been mentioned.

- a. Shayanama - Lying down, sleeping.
- b. Svaapá - Sleeping, Sleep, Dreaming, Sloth.
- c. Swapnah - Sleep.
- d. Samveshah - Approaching near to sleeping.

In Shabdaratnavali, two synonyms have been mentioned.

- a. Suptih - Deep sleep, sleepiness.
- b. Swapnam - Sleepiness.⁵

Actio-Pathogenesis

Acharya Vagbhata has mentioned Vata-Pitta vriddhi in causing nidranasha. It is caused by multiple causative factors. Acharya Sushruta has mentioned that the heart is the seat of Chetna in the

body and when this is invaded by tamoguna, body gets tired due to work, fatigueness of mind and sense organ which further promotes Nidra. ⁶

Importance of Nidra

- Like proper diet, proper sleep is also necessary for the maintenance of the body.
- According to Acharya Charaka, the trayoupastambha (sub pillars) i.e., aahara, nidra and bramhacharya, are basic requirements for maintenance of a living organism.
- All the things like happiness, nourishment, boniness, strength, weakness, knowledge, ignorance, sterility, life and death of an individual depend on the nidra.
- According to Acharya Kashyapa, having good sleep at a proper time and period is one of the characteristics of a healthy man.⁷

Symptoms of Anidra

Ayurvedic classics list the following Symptoms of Anidra:

Symptoms of Anidra	Acharya Charaka ⁹	Acharya Sushruta ¹⁰	Ashtanga Hridaya ¹¹
Shiroroga	+	-	-
Tandra	+	+	-
Angamarda	+	+	+
Jrumbha	+	+	+
Akshi gaurava	+	-	+
Akshijadya	-	+	-
Angajadya	-	+	-
Alasya	-	-	+
Shirogaurava	-	-	+
Moha	-	-	+
Shirojadya	-	+	-

Ancient Treatment of Anidra

As per Acharya Charaka ¹², certain Panchakarma therapies are applied for Anidra which are as follows-

S.No.	Panchakarma therapies
1.	Abhyanga- specially savanga abhyanga (full body massage)
2.	Akshitarpana
3.	Murdhataila- anointing the head with oil. it is of four types-
a.	Abhyanga (head massage with oil)
b.	Parisheka (dripping oil all over the head)
c.	Basti (causing the oil to elevate above the head)
d.	Pichu (covering head with oil-soaked cloth)

According to Bhavaprakasa ¹³, and Ashtanga Samgraha ¹⁴ one more karma i.e., Padabhyanga (foot massage) is also mentioned for sound sleep as Nidraprasadkar.

Classification of Nidra ⁸

Ayurveda list the following six forms of nidra and their corresponding causes:

- 1.Tamobhava: An abundance of tamas.
- 2.Shleshmasamudbhava: Excess of Kapha dosha.
- 3.Manahsharira shram samudbhava: Exhaustion, both bodily and mentally.
- 4.Agantuki: Adventitious.
- 5.Vyadhianuvartini: Disease sequelae.
- 6.Ratri Swabhava Prabhava: Physiological slumber that takes place at night.

Ayurvedic Herbs for treatment of Anidra

Ayurvedic herbs are used both in single as well as compound forms. Several drugs with Medhya, Rasayana, Nidrajanan, Vatsamak and Balya properties are used for the treatment of Anidra. ¹⁵⁻¹⁸

Single Drugs

S.No.	Single form	Therapeutic Action/Dose
1.	Sarpagandha churna	It has strong sedative and sleep-inducing properties.
2.	Ashwagandha churna	It enhances memory and invigorates the intellect. It calms and revitalizes our nerves. Before meal, 3 g of churna is taken twice a day along with sugar and ghrita.
3.	Jatamansi churna	It calms the neurological system. It also improves memory and raise level of neurotransmitters like serotonin. After meal, 500 mg to 1 g dose is taken 2 times daily with the milk.
4.	Vacha churna	It is a powerful herb for mind-calming that relieves sadness, anxiety, and tension. Dose- 500 mg-1g
5.	Brahmi churna/ swarasa	1-2 g /10 ml BD with milk and sugar.
6.	Mandukparni churna/ swarasa	1-2 g /10 ml BD with milk and sugar.
7.	Shankhapuspi churna/ swarasa	1-2 g /10 ml BD with milk and sugar.

Compound form

S.No.	Compound form
1	Mansyadi kwatha
2	Brahmi vati
3	Sarpagandhadi vati
4	Manasmitra vatak
5	Brahmi ghrita
6	Brahmi Rasayana
7	Ashwagandharishta
8	Saraswatarista
9	Medicated Oil- Himsagar taila, Narayana taila, Kshirabala taila for panchakarma procedures.

Drugs for treatment as per Ayurvedic Pharmacopoeia of India ¹⁹

S.No.	Plant Name	Chemical Constituents	Part Used	Therapeutic Use
1.	Jatamansi	Essential oil and resinous matter	Rhizome	Anidra, Manasa roga
2.	Brahmi	Alkaloids	Whole Plant	Manasa roga
3.	Ashwagandha	Alkaloids and Withanolides	Root	Vata roga, Daurbalya (weakness)
4.	Atmagupta	Fixed oil, Alkaloids and 3,4- dihydroxyphenylalanine.	Seed	Vata roga, Daurbalya (weakness)

Nutraceutical Approach

According to FSSAI, Nutraceutical is a category of food which consists of extracts, isolates, and purified chemical compounds which helps to maintain health.²⁰

Nutraceutical is composed of two words: Nutrient and Pharmaceutical. It is a food supplement that has a crucial role in maintaining the healthy body and provides necessary supplements required for the various metabolic processes to regulate the body functions and thus helps to turn aside our body from diseases. The field of Nutraceuticals is fit for treating sleep disorders like Insomnia, because of its quality of being Non-toxic,

Non-habit forming and being particularly more efficient which has made it an excellent option. Melatonin, L-tryptophan, L-Theanine, Vitamin B and Magnesium etc. play an important role in the treatment of Insomnia.²¹

Insomnia and its causes

Many things can contribute to the complaint of not getting enough sleep, including trouble falling asleep, waking up during the night and finding it difficult to go back to sleep, waking up too early in the morning, or unrefreshing sleep. Anxiety, stress and depression are some of the common causes of chronic insomnia. Anger, worry, grief and trauma are also causes of insomnia.²²

Nutraceuticals used in the treatment of Insomnia ²⁰

As per FSSAI guidelines

S.No.	Material name	Dose
1.	Melatonin	2-10 mg/day, max
2.	Ashwagandha	3-6 g (Root Powder)
3.	L-Theanine	50-200 mg/day, max
4.	Jatamansi	2-5 g (Stem), 250-500 mg (Extract)
5.	Kapikacchu	10-20 g (Decoction), 0.5-1 g (Extract)
6.	Brahmi	5-10 g (Whole plant), 0.5-1 g (Extract)
7.	Jyotismati	3-5 g (Seed/Leaf), 5-15 drops (Seed oil)

Mechanism of Action

S.No.	Material name	Mechanism	References
1.	Jatamansi	Jatamansone, the Sesquiterpene from N-jatamansi exerts tranquilizing activity in mice. It affects the metabolism and biosynthesis of serotonin in the brain tissue, thus leading to reduction in the brain level 5HT.	23
2.	L-Tryptophan	Plays an important substrate role for several bioactive compounds including serotonin and melatonin. These bio-actives help to induce sleep.	24
3.	Melatonin	After intake of melatonin, it interacts with MT (1) and MT (2) receptors present in Hypothalamus. After interacting it sends signal to the other receptors that start a cascade of action to induce sleep.	25
4.	Ashwagandha	Withaferin-A, Withanolides etc. affect CNS as per animal studies which shows significant enhancement in the function sensitivity of the 5HT receptor which further plays important role in mediating anti-depressant action.	23
5.	Vitamin B	Vitamin B act as coenzymes in a great proportion of the enzymatic processes that support every aspect of cellular physiological findings, including generation of energy and anabolic metabolism. Vitamin B6 acts as a cofactor in the synthesis of several neurotransmitters, including melatonin and serotonin.	26

CONCLUSION

According to Ayurveda Aahar (diet), Nidra (Sleep) and Bramhacharya (Celibacy) are the three sub pillars which is important for the maintenance of the health of an individual. The

main study of this article is to review the importance of Nidra, causes of Anidra, management of Anidra by panchakarma therapies like Abhyanga, Padabhyanga etc., and by single and compound forms of Ayurvedic herbs and management of Anidra with the Drugs mentioned in API as well as FSSAI. From the

above review collection, it can be stated that the sleep shows a constructive effect on to the body and it can be treated by various drugs of Ayurveda and Nutraceuticals.

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